

ABSTRACT OF THE DISCLOSURE

A reactive precursor feeding manifold assembly includes a body comprising a plenum chamber. A valve is received proximate the body and has at least two inlets and at least one outlet. At least one valve inlet is configured for connection with a reactive precursor source. At least one valve outlet feeds to a precursor inlet to the plenum chamber. A purge stream is included which has a purge inlet to the plenum chamber which is received upstream of the plenum chamber precursor inlet. The body has a plenum chamber outlet configured to connect with a substrate processing chamber. In one implementation, the plenum chamber purge inlet is angled from the plenum chamber precursor inlet. In one implementation, structure is included on the body which is configured to mount the body to a substrate processing chamber with the plenum chamber outlet proximate to and connected with a substrate processing chamber inlet.